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Running head: METAPHOR-LED DISCOURSE ANALYSIS

The Discourse Dynamics Approach to Metaphor and Metaphor-led Discourse Analysis

Lynne Cameron

The Open University, UK

l.j.cameron@open.ac.uk

Robert Maslen

Bradford

UK

Zazie Todd, John Maule, Peter Stratton and Neil Stanley

University of Leeds, UK

Abstract

The use of metaphor as a tool to uncover people's ideas, attitudes and values through analysis of discourse is demonstrated and illustrated with data collected in a social science research project. A "discourse dynamics" approach to metaphor situated within a complexity / dynamic systems perspective is developed. This approach is turned into a method of "metaphor-led discourse analysis" which is described in detail, using a focus group discussion to illustrate the procedure: transcription; metaphor identification; coding metaphors and using software; finding patterns of metaphor use from coded data. The reasoning that justifies decisions at each stage of the procedure is made explicit so that the trustworthiness of the method can be maximized. The method of metaphor-led discourse analysis has been developed through a series of empirical projects to be accessible and relevant to social science researchers as well as to metaphor scholars.

The Discourse Dynamics Approach to Metaphor and Metaphor-led Discourse Analysis

Social science researchers increasingly use discourse as data to investigate social phenomena, including such topics as family relations, poverty and social equality, educational practice and outcomes, radicalization and terrorism. As a metaphor scholar, the first author has wanted to contribute to social science research efforts, impelled by the conviction that, since metaphor reveals something of how people think and feel, it can be used as an empirical tool. Conceptual metaphor theory offered the tantalizing possibility of finding out about people's ideas by examining the metaphors they use. However, cognitive theory seriously downplays the influence of language on metaphor, and the importance of the specifics of the language-using situation in which metaphor occurs. It is more concerned with metaphor at the conceptual level across whole speech communities than with the complex dynamics of real-world language use in social situations, and thus of limited help in understanding the specifics of social issues.

Recent developments in complexity theory and dynamic systems theory suggest alternative and powerful ways to understand the social and psychological worlds, by focusing on change and how change occurs. A complexity / dynamic systems perspective highlights change and connectedness in social and cognitive systems, and, applied to the social sciences, identifies complex dynamic systems at all scales from the cultural through to the individual. The perspective also changes how we see metaphor: a metaphor is no longer a static fixed mapping, but a temporary stability emerging from the activity of inter-connecting systems of socially-situated language use and cognitive activity. This dynamic perspective on metaphor raises new possibilities for investigating metaphor in discourse, and thereby contributing to social sciences research.

This paper answers the question: How can metaphor be used as a tool to uncover people's ideas, attitudes and values through analysis of discourse? It describes a discourse dynamics approach to metaphor situated within a complexity / dynamic systems perspective, and its method of metaphor-led discourse analysis, which has been developed through a series of social science research projects, including the one drawn on in this paper. It explains the theory behind the discourse dynamics approach to metaphor and then shows in some detail how the approach is turned into a methodology for working with discourse data, using a focus group discussion to illustrate, and making explicit the reasoning that justifies decisions at each stage of the research process.

A Dynamic View of the Relation between Metaphor, Discourse and People's Ideas, Attitudes and Values

As we take, in fact, a general view of the wonderful stream of our consciousness, what strikes us first is this different pace of its parts. Like a bird's life, it seems to be made of an alternation of flights and perchings.

(William James, 1890)

At the heart of a complexity / dynamic systems approach lies an understanding of linguistic and cognitive phenomena as processes, flows or movement rather than as objects (Cameron, 2003, 2007a; Cameron and Deignan 2006; Gibbs and Cameron 2008; Larsen-Freeman and Cameron 2008). Key constructs of a complexity / dynamic systems perspective include: inter-connected systems in continual change; inter-connected timescales and levels of activity within systems; nested or inter-connected systems and sub-systems; self organization of systems and the emergence of temporary stabilities in the activity of systems, with variation alongside stability.

To illustrate how these ideas can be applied to discourse, extract 1 presents a short section of talk from a focus group discussion, collected as data on a social sciences project about people's perception of the risk of terrorism¹. The research questions for this part of the project were:

How do people use metaphor in talk about topics related to terrorism?

What do their metaphors reveal about their ideas, attitudes and values?

The terrorism-related topics were the following:

- the threat of terrorism and terrorists
- communication about terrorism by media and by the authorities
- responses to terrorism
- groups within society.

Over a period of about 90 minutes, the eight male participants responded to a set of questions posed by the moderator, designed to elicit talk about how they feel and act in response to the threat of terrorism in their everyday lives. The extract comes from near the beginning of the discussion, at which point participants are still strangers to each other, having shared only their names (here replaced with pseudonyms) and where they come from. The moderator opens this exchange by asking for initial reactions to the idea of terrorism (lines 76-77). The underlined words and phrases in the extract are those identified as being used metaphorically. We return later to details of how the transcript is organized and how metaphors were identified.

Extract 1

74	Mod	okay.
75	Mod	... Terry,
76	Mod	.. what is the first <u>thing</u> ,
77	Mod	that <u>comes into</u> your mind?
78	Terry	it --
79	Terry	terrorism to me,
80	Terry	it's --
81	Terry	.. it's a <u>sneaky way</u> --

82 Terry .. it's almost like bullying,
 83 Terry .. 'cos you don't know when it's going to happen,
 84 Terry you can't .. legislate for it,
 85 Terry .. you can't control --
 86 Terry it's not like war,
 87 Terry .. where you've got two .. opposing sides.
 88 Terry .. terrorism .. is just a --
 89 Terry an invisible enemy.
 90 Terry .. almost.
 91 Terry .. I mean you don't know when it's going to happen,
 92 Terry .. where it's going to happen,
 93 Terry .. but you do know,
 94 Terry that people are going to get,
 95 Terry ... killed.
 96 Terry maimed.
 97 Terry whatever.
 98 Mod ... and,
 99 Mod .. Phil?
 100 Phil hiya.
 101 Phil .. er,
 102 Phil it's --
 103 Phil well a lot of er,
 104 Phil a lot of bloodshed,
 105 Phil .. erm,
 106 Phil you'd get from it.
 107 Phil ..erm,
 108 Phil ... I would also say it's a flaw in the system,
 109 Phil as well.
 110 Phil someone's not doing their job right.
 111 Phil .. 'cos if somebody were doing their job right,
 112 Phil it wouldn't happen in the first place.

The discourse dynamics approach regards this transcription as a 'trace' of discourse activity that took place in real-time. The discourse activity is seen as the unfolding of the complex dynamic system that is the group of people engaged in their discussion. As speakers build on one another's or their own ideas, or disagree and offer alternatives, the dynamic system of discourse develops, adapts and flows. The discourse dynamic system arises from the interaction of the sub-systems of each speaker. Within each speaker we can identify further sub-systems which interact as people participate in talk: complex dynamic language systems, complex dynamic cognitive systems, complex dynamic physical systems. These inter-connected systems also connect outwards into environmental and social-cultural systems. Dynamic systems can be identified on (at least) two scales: of time and of social organization. Timescales related to the focus group

discussion range from milliseconds of brain activity through the scale of the utterance to episodes of connected talk that last for several minutes to the hour and a half of the discourse event and beyond to months and years of talk and activity in people's lives. Levels of social organization range from the tiniest biological system inside the individual outwards to social groups, communities and nations.

A striking and useful way of conceptualizing the activity of a dynamic system is to think of successive states of the system as points on a landscape. The changing system creates a trajectory in this landscape as it moves through successive states; the surrounding landscape represents possible states that the system might have occupied but did not—words that might have been spoken and ideas that might have been talked about, but were not. The trajectory or path represents the actual states that the system moves through, and remains as a trace of the system activity after the event, just as the shiny trail left behind by a snail is a trace of its movement or the white trail left in the sky by a speeding jet is a trace of its flight. The words spoken and the metaphors used in the discussion are left behind as a trace of the discourse system in its landscape. The metaphor trace or trajectory connects into multiple systems of thinking and language use at other timescales and other levels of social organization. Through tracking these connections, we aim to exploit the possibilities of metaphor as a tool for understanding more about people's ideas, values and attitudes.

In describing terrorism as “a sneaky way” in line 81 of extract 1, Terry uses a conventionalized movement metaphor, “way”, to say something about the method or manner of terrorism; pre-modifying with “sneaky” evokes a sense of movement that is somehow suspicious and concealed, trying to avoid being noticed. As a metaphor about terrorism, “sneaky” expresses an attitude towards it as negative, underhand and deceptive. Terry immediately continues with a

comparison between terrorism and “bullying”, as a specific example of “sneaky” behaviour. “Bullying” (in current British English usage) relates to a cultural schema in which a larger or older child oppresses a smaller or younger victim, usually in a school scenario. The unfair exertion of power in “bullying” is considered to be both cowardly and socially unacceptable. Terry, in using “sneaky” and “bullying”, builds up his negative framing of terrorism while also appealing to shared social and cultural knowledge in the group. In lines 83-5, he proceeds to justify his evaluation of terrorism as “sneaky” and like “bullying” by elaborating particular aspects: unpredictability (“you don’t know when it’s going to happen”) and uncontrollability (“you can’t control”). The discourse moves in a slightly different direction with the negative comparison, or contrast, in line 86 between terrorism and “war”²; once again a particular aspect, this time of difference, is and then elaborated: war has “two opposing sides” whereas in terrorism the “enemy” is not to be seen across the metaphorical space of the conflict³ but is “invisible” (89). Terry ends his turn with a reiteration of difference between terrorism and war, the unpredictability in time and place of terrorist events, and similarity: in the predictable outcomes of both – “people are going to get killed .. maimed” (93-97).

In complex dynamic systems, layering and nesting of systems supports the emergence of self-organized phenomena from one level or scale to another. In the natural world, examples of self-organization and emergence include: the termite nest that emerges from the activity of individual termites; the cloud that emerges from the interaction of wind, humidity and temperature; the forest that emerges from the interaction of many different species of flora and fauna. Making an analogy between the natural world and the discourse world leads us to see the focus group discussion as emerging from the interaction of the individual speakers. At a more detailed level, certain ways of framing ideas metaphorically may emerge across speakers and

across the timescale of the discussion as agreed and shared. As we will see later in this paper, following its initial voicing by Terry in extract 1, the framing of terrorism as cowardly emerged from the talk across the group and across the timescale of the discussion.

Metaphor, whether conceptual or linguistic, from the discourse dynamics perspective becomes processual, emergent, and open to change. Rather than seeing metaphor as a ‘tool’ or some other kind of object that is put to use, a processual view attends to metaphor activity. Metaphor is not part of a system that is put to use; from a dynamic perspective, there is only use⁴. Through self-organization and emergence, metaphors and systems of metaphors can stabilize out of use. That stability too though is dynamic, open to further change, and accompanied by flexibility. The flexibility or variability around stabilized phenomena allows the possibility of further change in the continuing flow of discourse. Linguistic metaphors, or rather ‘metaphoremes’ (Cameron & Deignan, 2006), stabilize as idiomatic or preferred forms and associated pragmatic and semantic features that emerge from interaction. Depending on communicative activity, they may continue to change or they may remain in the stabilized form for a long period of time (Bowdle & Gentner, 2005). The phrase that Phil uses in line 108, “a flaw in the system”, has probably stabilized linguistically, and we could check this in a large corpus should we wish to. Conceptual metaphor and primary metaphor, as emergent cognitive phenomena, also stabilize through social and linguistic interaction over time, and remain open to continuing change (Barr, 2004; Gibbs & Cameron, 2008). Understanding political/social life as a system seems to be a stabilized idea for Phil, and probably most British speakers of English⁵.

The metaphorical contrast between terrorism and war voiced by Terry (86) appeals to shared knowledge in the group that connects to the global socio-cultural arena; the metaphorical

“war on terror” is attributed to former US president George W. Bush and used widely in the media and by politicians from 2001 (Brewster Smith, 2002; Lakoff, 2001; Jackson, 2005).

In the discourse dynamics approach, the connection between linguistic metaphor and conceptual metaphor is no longer just one of top-down 'instantiation' from thought to language (e.g. Kövecses, 2005; Lakoff & Johnson, 1980) but instead is one of interaction between language and thinking. What is said both reflects and affects thinking. A dynamic perspective on the relation between thinking and speaking leads us to see the words that people speak as fluid, tentative verbalizations of ideas that themselves may be fluid and tentative. Ideas and attitudes are influenced by the circumstances of the discourse that speakers are involved in, including other participants, and by the language being used (Cameron, 2003, 2004; Slobin, 1996; Spivey, 2007). When Phil begins his turn in lines 100-4 by talking about the “bloodshed you’d get from it”, he is probably affected by Terry’s immediately previous references to people getting “killed, maimed whatever” (95-7). One voiced thought may activate another.

To take account of the inevitable influence of other discourse participants on what is said, we need to add the theoretical framework of dialogism, with its Bakhtinian view of language as continually shaped by the interdependence of self and other (Linell, 1998; Markova, Linell, Grossen & Orvig, 2007). Dialogism sees utterances and exchanges, not only as influenced by the reactions of other participants, but also by speakers' perceptions of what their listeners think and how their listeners may interpret what they say: stepping into the apperceptive territory of the other, as Bakhtin puts it (Bakhtin, 1981). In a focus group discussion, for example, speakers express ideas that are partial or incomplete, trying them out with various degrees of assertiveness and tentativeness as they assess and react to their reception by the other participants, who they have only just met.

From this theoretical framework of discourse dynamics, illustrated with a brief extract of talk, we proceed to an overview of the empirical method in which metaphors are used to investigate people's ideas, attitudes and values.

Method of Metaphor-led Discourse Analysis: Overview

“the method of dynamic theories is heuristics, i.e. the art of discovery”

(Markova et al, 2007, page 199)

Processes of Analysis

The discourse dynamics method of metaphor analysis works with metaphorically-used language, and more specifically, as we saw from extract 1, with linguistic metaphor vehicles. After data has been prepared by transcription from recordings, linguistic metaphors are identified. The metaphors are then coded for various features, and the coded metaphors examined for patterns or systematicity that yield information about participants' ideas, attitudes, and values.

Earlier empirical studies support the assumption that speakers' metaphors reveal useful information about their ideas, attitudes and values. Cameron (2003) showed how teachers' metaphors in classroom talk revealed their attitudes to learning and their expectations of students, as well as offering students ways of thinking about curriculum content. Cameron (2007b) showed how metaphors in reconciliation conversations framed key ideas and changed as participants' attitudes to the reconciliation process evolved. Participants' metaphors may also work implicitly by invoking “conventional shared understandings” (Howe, 2008, p.19; Strauss & Quinn, 1997). On a larger scale of social organization, studies of corpus data have shown how metaphors are used in talking about and conceptualizing political issues, and how they carry attitudes and values (Charteris-Black, 2004, 2006; Musolff, 2004; Semino, 2002)⁶.

As other discourse-based studies reveal (Strauss & Quinn, 1997; Quinn, 1991), and as our own studies of metaphors and talk have repeatedly shown (e.g. Cameron, 2003, 2008), metaphorical and non-metaphorical talk interweave in the achievement of discourse goals, and metaphors shift and change within and across speakers. To state that Terry in line 86 uses the conceptual metaphor “TERRORISM AS WAR” would be incomplete, and in this case clearly misleading; we need the discourse dynamic detail: that the speaker explicitly disagrees with the metaphor, offers an alternative (“bullying”), and that he uses both the alternative and the disagreement to express his negative emotions about the unknowability, the uncontrollability and the inherent unfairness of terrorist action. Each instance of metaphor is tightly embedded in its immediate discourse context. As we identify, across the flow of the talk, patterns of metaphor use that suggest patterns of meaning making, we need to find ways to keep that context alive and active. Even when being listed or sorted, metaphors need to somehow retain their context; as we will see later, this need provides a criterion for selecting tools to help analysis.

The discourse dynamics method of metaphor analysis continually moves across levels and timescales of the dynamic systems involved: the micro-level of a particular metaphor, the meso-levels of episodes of talk or topic threads, the macro-level of the conversation as a whole, and the broader socio-cultural level. The analysis is neither inductively 'bottom-up' (as would be an approach that ignored the possibility of conceptual metaphors) nor deductively 'top-down' (as would be a cognitive approach that assumed every instance of metaphor in talk was the expression of underlying conceptual metaphors). It is rather an interactive and recursive process that keeps moving between evidence in the transcribed talk and the bigger picture.

The metaphor analyst needs to work with knowledge of the whole discourse event and usually combines metaphor analysis with other types of discourse analysis, e.g. conversation

analysis, or positioning theory (Cavalcanti & Bison, 2008; Low, 2008). In the project drawn on here, we make use of the dialogic “rhetorical and interactional” analysis of focus group discussions developed by Markova and colleagues (Markova et al., 2007, p.133). They describe focus groups as constructing, through their talk, "an intricate web of sense-making and sense-creating" (ibid, p. 3). Metaphor analysis accesses this intricate web through the discourse dynamics of metaphor use, and by interpreting metaphor use in the light of the discourse activity. Prompted by the analyses of Markova et al., we examine metaphor in discourse activity with the expectation that the group interaction will display "tensions, contradictions, vagueness and ambiguities as well as regularities and recurrent themes" (ibid, p. 46), with people hiding or displaying their multiple personal and social identities in their talk. The dynamics of the "dialogue of ideas" can be traced by examining how topics are framed, how framing evolves, how people position themselves in respect of topics and framings, at recurrent topics that produce themes in the talk, and how culturally-embedded and shared themata are implied in the talk. People bring to the discussion their cognitive and affective framings of terrorism, what Markova et al. (ibid, p. 48) call “external framings”; in contrast, “internal framings” are those that develop within the focus group discussion⁷.

Trustworthiness in Metaphor-led Discourse Analysis

Ensuring the quality of metaphor analysis requires attention to different aspects of trustworthiness at the different stages (Lincoln & Guba, 1985, 2000). Validity, as rigorous connections between theory and empirical process, applies at all stages; transcription and metaphor identification aim to be rigorous and reliable; the interpretive processes of pattern-finding must provide strong enough evidence in the data to warrant inferences made about ideas,

values and attitudes. We return to how trustworthiness is maximized as we proceed to the detail of the various steps.

Metaphor-led Discourse Analysis: Transcribing Spoken Interaction

As a trace of discourse activity, the transcription retains some information about the dynamics of the event but has lost much of what might have been physically or affectively relevant at the time, including visual information from clothes, gesture and facial expression, situational influences such as the design of the room or the temperature, and affective influences on speakers such as moods or alcohol consumption.

The textual form that we use for the transcription deliberately tries to represent something of the temporal dynamics iconically, through the use of intonation units and layout. An intonation unit (as described by Chafe (1996) and du Bois et al. (1993)) is the speech produced under a single intonational contour, often but not always with a single breath. Intonation units often coincide with syntactical clause units, but are sometimes truncated syntactically. Chafe claimed cognitive reality for intonation units by suggesting that each was an 'idea unit'; ideas are spoken about one at a time. As a mind-body unit, the intonation unit is theoretically appropriate for the embodied perspective of metaphor in dialogic dynamics.

Some sense of the temporality of the original talk is represented in reading intonation units vertically down the page, rather as one scrolls down a computer screen. Over large stretches of discourse, the time taken to produce an intonation unit averages at about two seconds, so that the number of the intonation unit multiplied by two gives an approximate time from the start of the conversation. Because intonation units are by their nature limited in their

maximum length, the transcription lines fit neatly into columns in software such as Excel or ATLAS_{ti}, an epi-phenomenon but nevertheless helpful for further analysis.

Transcription into intonation units needs training and, with time and effort, produces reliable results (Stelma & Cameron, 2007). The level of detail to which the recording is transcribed depends on the research goals. In our transcription, see extract 1, we mark the ends of intonation units for four types of intonation: a full stop/period indicates a final closing intonation; a comma indicates a slightly falling or level pitch and continuing intonation; a question mark indicates rising intonation; dashes indicate an incomplete intonation unit. Overlaps across speakers are marked with square brackets. Pauses are considered important enough to transcribe, particularly since deliberate or more novel metaphors are often preceded by a pause. Minimal micro-pauses are marked with double dots .., slightly longer micro-pause with three dots ..., and pauses longer than one second with the number of seconds in brackets, e.g. (2.0) indicates a pause of approximately two seconds. In this transcription, we did not mark stressed syllables or transcribe details of pronunciation.

The focus group data included many instances of quasi-reported speech, in which a speaker adopts the voice of some other person or organization; these utterances are enclosed in <Q ... Q> brackets. The symbol <X...X> represents a stretch of speech which was indecipherable to the transcriber.

The transcription of the 90 minute focus group discussion has 5490 intonation units.

Metaphor-led Discourse Analysis: Metaphor Identification

The Identification Process

Once the transcription is completed, the next step is to identify linguistic metaphors⁸ and underline the vehicle terms. These are the words or phrases that can be justified as somehow

anomalous, incongruent or ‘alien’ in the ongoing discourse; they have some other meaning that is more basic in some way and that contributes to the meaning in context through comparison (pragglejaz group, 2007). Vehicle terms are what cognitive metaphor theory calls source domain terms. Explicit topic terms may be present, but more often vehicles appear anomalous against the topic-related flow of the ongoing talk rather than in relation to specific topic domain words or phrases (Kittay, 1987).

The discourse dynamics approach holds that metaphoricity depends on the evolving discourse context, and that we can only understand metaphor in discourse by examining how it works in the flow of talk (or text). As researchers, when we come to the identification of metaphor in the transcribed talk, we will have already participated in the discourse event or listened to the recording of it, will have transcribed or checked the transcription, and so bring to identification familiarity with the whole of the discourse event; metaphorical uses of words and phrases are identified against this background knowledge of the whole event.

The intricacies and difficulties of identification are now well documented (e.g. Cameron, 2003; pragglejaz group, 2007). Problems arise in identification because metaphor cannot be defined by necessary and sufficient conditions that would create clear category boundaries (Cameron, 1999). Identification of metaphor in talk presents all the usual problems, and some particular decisions that have to be made: about the inclusion or exclusion of highly conventionalized words and phrases such as phrasal verbs and prepositions, and deciding where a metaphor vehicle begins and ends. In the perception of terrorism project, we decided to include prepositions in, on, around but to exclude by and to; we excluded delexicalized verbs have, do, get. Unlike the pragglejaz procedure, we underline vehicle terms rather than individual words. What is underlined is the word or phrase that is being used metaphorically. The verb and

particle(s) of a phrasal verb are included as a single vehicle, “get from”; the phrase “flaw in the system” is kept together as a single vehicle.

The beginning and end of metaphor vehicles is often indeterminate: for example, whether the vehicle extends into the determiner “a (flaw in the system)”. In the flow of talk, the topic domain blends into the vehicle or source domain rather than being independent of it, and to try to assign clear and warranted boundaries to vehicle terms is inherently problematic. We therefore extend the vehicle underlining to include all that appears relevant while accepting the impossibility of always being able to decide where the beginning and end should be marked. Because we count metaphorically-used terms rather than words, the indeterminacy of beginnings and endings is not usually an issue; the numerical measure that we use for comparison across discourse types, metaphor density (Cameron, 2003), is calculated as the number of metaphor vehicles per thousand words of transcription.

Working with vehicle terms rather than words presents us with a different issue – that of metaphors embedded in metaphors. For example, “flaw” might be considered metaphorical when used to refer to a “system” since “flaw” seems to have a basic meaning of a naturally-occurring fault, whereas “system” suggests a non-natural type of organization. Such embedded or nested metaphors are most efficiently identified from the list of metaphorically-used terms in the second round of identification.⁹

The discourse dynamic approach considers all possible candidates for metaphor, rather than restricting to specific types of metaphors or to specific topics. We did not, for example, search just for words and phrases related to the domain of “WAR” and then check these for metaphorical use. The justifications for considering all possible linguistic metaphors are, firstly, reliability: checking every word minimizes the risk of missing metaphors; and secondly,

theoretical: in advance of analysis, we don't know which metaphors might contribute to emergent themes in the interaction. For example, the multiple preposition metaphors in the talk, although apparently insignificant individually, contribute to a metaphorical view of society as a physical landscape e.g. "in the city"; "people in gangs"; "coming from over there".

1140 linguistic metaphor vehicles were identified in the transcription of the focus group discussion.

Trustworthiness in Identification

Reliability in metaphor identification is maximized through a range of techniques. Decisions about what is included and not included as metaphor are recorded in project notes that all analysts use to follow the same guidelines. All researchers carrying out identification receive initial training which is enhanced through cross-rater checks of all data. In these checks, another analyst examines a sample of each transcription (we aim at 10%), first separately and then in discussion with the first analyst to reach shared agreement. Discussions may use a dictionary or a large corpus as additional sources of information about basic meanings of words and phrases. Once all problematic cases have been dealt with, each transcription receives a final check. Reliability thereby becomes an ongoing process of refining skills, rather than a finalizable process that can be adequately captured through a numerical measure.

Metaphor-led Discourse Analysis: Metaphor Coding

Coding and pattern-finding are hermeneutic, recursive processes that inform each other, not independent, sequential steps. Although formal coding cannot take place until transcription and identification have been completed, and although coding and pattern-finding are described here in a linear sequence, in practice we start noticing patterns and questions that we might ask

of the data about possible patterns even at the data collection stage. For example, extract 1 leads us to notice an attitude towards terrorism as cowardly that we will later track through the data to see whether it meets agreement from the whole group, and whether it is developed in more depth or breadth.

Using Software to Code the Metaphors

Coding condenses the data into a more manageable form than the transcript; it allows the researcher to sort and re-sort the data to investigate possible patterns and themes.

Each metaphor is multiply coded for its topic, vehicle, speaker, and position in the talk. We demonstrate here how the perception of terrorism project made use of Excel software. This straightforward and widely available software allows the data to be sorted by each of its codes, or by several codes at the same time. In the screenshot shown in figure 1, the metaphors from extract 1 have been sorted by column E, the line or intonation unit number, so that they appear in the same order as in the transcript. The underlined metaphor vehicles are listed in column D, with intonation unit/line numbers in column E and the speaker in column F. Whole intonation units appear in column G, providing a connection back to the discourse context of the metaphor. Column H contains the code for the question from the moderator's schedule that is being answered at that time: here MIND represents the question "What comes into your mind when you think terrorism?" Column C contains the code for the particular focus group, since we eventually put data from 12 groups into the same database. While these columns and codings are straightforward, column A, the "key topic", and column B, the "vehicle grouping" need further explanation.

Figure 1. about here

The full transcript remains available throughout, either as a worksheet in the same Excel document as the coding worksheet or, the first author's preference, in hard copy.

Topic Coding

The topic of a linguistic metaphor is the real world referent of the vehicle word or phrase. In spoken interaction, there is often no explicit topic verbalized (see Cameron, 2007a for the possible implications of this empirical finding). For example, when Phil says, line 108 in extract 1, "I would also say it's a flaw in the system", we have to infer the referent of "system", using what he says in the following intonation units to guide our interpretation. The extra information is itself not very specific: "someone's not doing their job right", and, although it seems justifiable to interpret this as reference to the police or other national authorities, there is no evidence to warrant a more specific interpretation. Given also that we were dealing with more than 1000 linguistic metaphors in each transcript, it became impractical to work out and agree specific topics for each vehicle. Our solution was to streamline topic coding by constructing and using a limited set of key discourse topics relevant to our research topic and research questions. Thus, "system" was allocated to the key topic: Responses to terrorism (coded as 3) and one of its two sub-topics, Responses to terrorism by the authorities (coded as 3A) (the other being, Responses to terrorism that affect Muslims (3M)). The three other key discourse topics were: Terrorism (including acts of, risk of, causes of, perpetrators (coded 1)); Communication about terrorism (coded 2) (with sub-topics: Communication about terrorism by the media (2N) and Communication about terrorism by the authorities (2A)); Society and social groups (coded 4) (with a sub-topic: Muslims in society (4M)). A further topic coding Other covered everything else.

Column A in figure 1 contains the topic codes. If the complete database is sorted by column A, we can then see all the metaphors that were used in relation to each of the key topics.

Coding Vehicle Groupings

We code vehicle words or phrases according to their semantic content. This step is inspired and informed by conceptual metaphor theory, but with a difference. There is no a priori assumption that a particular conceptual metaphor is active when a speaker produces a linguistic metaphor (and it would be impossible to find the empirical evidence for such activation from discourse data). In this kind of discourse study, we are concerned with specifics rather than with the speech community at large: specific ways of talking metaphorically, and the attitudes and ideas of specific people. A linguistic metaphor is not assumed to be an instantiation of a pre-existing conceptual metaphor that connects a target domain with a source domain. In the discourse dynamics approach, the linguistic metaphor vehicle is the basic unit of analysis, with groupings of vehicles developed by the analyst to assist in finding patterns and systematicity across metaphors. To mark the ontological and empirical distinction between the theoretical constructs of conceptual metaphors, conventionally presented in capitals, and the vehicle groupings that emerge from working with vehicle terms, we format these with *italic capitals*. (SEE NOTE TO EDITOR ABOUT FORMATTING.)

The vehicle groupings are developed from the data, bearing in mind the kinds of source domain found in the cognitive literature, but always guided by the actual and specific spoken interaction. When the vehicle groupings are used to search for patterns in the coded data, they remain connected through the Excel chart to the actual words spoken and to the intonation unit in which they occur. Each line of data provides 8 pieces of information for the metaphor vehicle.

The active presence of the whole intonation unit and transcript keeps the analyst connected to the words of the original speakers.

Each vehicle term is assigned to a grouping that captures its essential semantic meaning: “way” is assigned to “MOVEMENT (PATH)” and “bullying” to “VIOLENT ACTION”. Since we do not assume that vehicles are instantiations of fixed and static source domains, in the coding process the groupings are kept tentative, loose and temporary, and firmed up only at the last moment. In the final stages of the analysis, when the groupings are confirmed, a final check is carried out to ensure consistent coding. Before that point, groupings can evolve through the following kinds of decisions:

- amalgamation of groupings: e.g. we initially had separate groupings of “ANIMALS” and “NATURE” vehicles that were later merged into one “NATURAL WORLD”.
- division and sub-division of groupings: e.g. “MOVEMENT” was subdivided for “SOURCE”, “PATH”, “GOAL”
- the addition of new groupings: e.g. “BUILDING” appeared in one focus group after analysis of several others where it had not been used; once it had been added, we went back and recoded words such as “support”.

As other scholars have noted, even working within the cognitive tradition there is no right answer to the question of how to assign and label a particular metaphor, no "single, proper level of abstraction to which the individual metaphor can be attributed" (Vervaeke & Kennedy, 1996; Ritchie, 2003). In some cases, vehicles might be placed in more than one grouping: “opposing sides” might have been assigned to “LOCATION” since it expresses an idea of (relative) position but it was decided that the idea of opposition in the phrase was more important in the discourse context and it was assigned to “CONNECT/SEPARATE”. In more recent projects

using the more flexible qualitative analysis software ATLAS.ti, vehicles have been assigned to more than one grouping, so that we can see which aspects of overlap are of interest, but in the project described here, vehicles were only assigned to one grouping – where there was more than one possibility, consistency was ensured by keeping notes of decisions and cross-checking.

59 vehicle groupings emerged from the coding process, including a small Other category (Appendix 1). The groupings are a mix of source domain labels familiar from conceptual metaphor theory, such as “MOVEMENT” and “SEEING”, and those more specific to the type and topics of talk about terrorism, such as “VIOLATE/LIMITS”, (“she was taking it to extremes”), and “CRAZY-WILD” (“our lives would be chaos”). Because of our research goals, “VIOLENT ACTION” was kept separate from “MILITARY ACTION” and from “PHYSICAL ACTION”. Participants’ frequent use of contrasts to emphasize points led to groupings that include antonyms, such as “CONNECT / SEPARATE” and “GIVE / TAKE”.

Trustworthiness in Vehicle Grouping

Deciding on the range of each grouping and on how to select a label that best describes a grouping is central to metaphor analysis, involving consideration of connections between metaphors and of discourse evidence to support decisions. In turn, decisions about groupings contribute to the noticing of patterns and themes in the data. For trustworthiness, each grouping decision carefully follows a central principle of this kind of interpretive analysis – rigorous assessment of the quality, and limits, of the discourse evidence underpinning a decision. As before, reliability is maximized by discussion, cross-checks by colleagues, and project notes that aid consistency. However, we must also take account of how the nature and outcomes of the process must impact on how we work with the coded data to find patterns and themes in metaphor use to help answer research questions about people’s ideas, attitudes and values.

Although we strive for as much rigor as possible, the vehicle grouping process is hermeneutic and involves imagination and creativity in describing how metaphors best fit together. Because of this and because of the dynamic nature of language in use, the vehicle groupings that we construct will inevitably have blurred boundaries and a degree of overlap.

The Outcomes of Metaphor Coding

After assigning a full set of codes to each metaphor in the transcript, the data has been reduced or condensed into a form that can be sorted in many different ways to test out hypotheses or discover tendencies. The metaphors have not been detached from their discourse context, but remain connected into it through the columns of the Excel worksheet and back into the transcript.

Metaphor-led Discourse Analysis: Pattern Finding with the Coded Data

The coded data can be used in two ways: to provide quantitative description of the data, and to explore networks of metaphors qualitatively.

Quantitative Description

Because of the hermeneutic nature of coding, particularly vehicle groupings, it would not be appropriate to use complicated statistics on the data. We can, however, compare numbers and, where useful, check the status of differences with chi-squared tests. For example, we can find out for each focus group, and compare across multiple focus groups:

- the numbers of metaphors produced by each speaker;
- the numbers of metaphors from a particular vehicle grouping used to talk about different topics;

- the range of metaphors (i.e. number of different vehicle groupings) used to talk about each of the key discourse topics.

Qualitative Exploration of Metaphor Use

The dynamic and dialogic analysis uses the coded data to find evidence of metaphor patterns and emergent themes that answer the research questions. During the coding stage, certain patterns of metaphor use will have started to reveal themselves to the analysts. In this qualitative and interpretive stage of the empirical work, these suggestive patterns are examined closely to see if there is sufficient evidence to warrant presenting them as findings, and further patterns are searched for in the coded data. This part of the empirical work moves backwards and forwards between the Excel table and the transcript, and is interpretive, again requiring (rigorous) imagination and creativity on the part of the researcher. The semantic analysis enabled by the vehicle grouping is combined with discourse dynamics analysis of the metaphors in action. A connected set of metaphors in the list may prompt us to go back to the transcript and look more closely at the interaction, and at the discursive function of the metaphors: the ideas, attitudes or judgments that metaphors are used to assert, negotiate, endorse or resist. The discourse dynamics analysis and interpretation of metaphor operates at the level of episodes (i.e. stretches of talk around the same topic, that can last up to a couple of minutes before a change of topic or speaker), and at the level of the discourse event (here, the focus group discussion). We examine metaphor connections across episodes and across the event, seeking out framing metaphors, i.e. sets of metaphors that are used about important themes in the talk, and some kind of concluding summary about the use of each framing metaphor. So for example, we can say that: "the focus group participants contrast terrorism metaphorically with war to emphasize its

unpredictability, uncontrollability and unfairness." In the process of extracting framing metaphors, we look at metaphor trajectories and at systematic metaphors.

As a first example, we take the metaphor vehicle "flaw in the system" that was used by Phil at the end of Extract 1, and which, in coding, was grouped as a "MACHINE" metaphor. A search of the database shows a total of 12 "MACHINE" metaphors, 7 of which come from Phil. The specific linguistic metaphor vehicle was used a second time¹⁰, in the same form by the same speaker at a later point in the discussion (extract 2), when Phil builds on a description by Eddie of how the terrorism event of 9/11 affected his wife:

Extract 2

870	Phil	when that Twin --
871	Phil	.. Twin Towers er,
872	Phil	.. happened,
873	Phil	it,
874	Phil	... (1.0) <u>put a flaw in the system</u> .
875	Phil	... someone's never done that before.

The topic of the metaphor is, as in extract 1, not made explicit and left rather vague, referring to some kind of disturbing of the established order. The trajectory of this linguistic metaphor is limited to these two instances, over about 25 minutes of the discussion, and shifts its topic slightly in its second use. If we broaden our examination to the other "MACHINE" metaphors shown in Figure 2, we find that Phil seems to think about society using a mechanical system metaphor; for him, there is systematic use of connected metaphors across to talk and these could be put together as a larger trajectory or trace which I have called 'systematic metaphor' and which would here be described as "SOCIETY IS A MECHANICAL SYSTEM". The systematic metaphor is the dynamic collection of connected linguistic metaphors, a trajectory from one metaphor to the next over the dynamics of talk. It is not a conceptual metaphor; at least it is different theoretically and ontologically.

Figure 2 about here

Because there is no substantive evidence from the data that other speakers use this metaphor systematically, other than that no one explicitly disagrees or offers an alternative metaphor for the same topic, and because the topic is not central to the research aims of the study, this systematic metaphor will not be an important finding. It might, however, prompt questions that could be investigated in other studies, with other data types and methods, e.g. corpus analysis of its use in the media.

A more productive metaphor trajectory arising from extract 1 starts with Terry's description of terrorism as cowardice (“sneaky way”) which is then contrasted with war (“not like war”). We illustrate the discourse dynamics of these metaphors as the discussion proceeds. Figure 3¹¹ plots instances of metaphors relating to cowardice (grouped under “CONCEALMENT” and “VIOLENT ACTION” in the Excel table) and to war (grouped under “MILITARY”).

Figure 3 about here

The numbers down the left-hand side are intonation unit numbers, and represent time. Each instance of a metaphor is represented by a diamond (cowardice) or a circle (war), with different colours (or shadings when viewed in black and white) for different speakers. Only five of the eight speakers use these metaphors, and two of them, Finn and Josh, only use “MILITARY” metaphors. The lines joining the metaphors represent the metaphor trajectory. We can see the trajectory moving from an initial cluster of metaphors at the beginning of the talk, in and following extract 1, to a second cluster around line 1100 and ending with an isolated pair of metaphors around line 3200.

We zoom back in from the metaphor trajectory to the more micro-level of the discourse dynamics of the two clusters. Extract 3 follows the talk of extract 1 and includes responses from Eddie and Ray.

Extract 3

115 Mod .. Eddie?
 116 Eddie ... it's er,
 117 Eddie bombs come to my mind,
 118 Eddie certainly,
 119 Eddie and er,
 120 Eddie I think it's a sneaky --
 121 Eddie .. sneaky way of doing it,
 122 Eddie as well.
 123 Eddie .. cowardice involved,
 124 Eddie .. hit and run,
 125 Eddie except they're,
 126 Eddie .. not even bothered about running now,
 127 Eddie you know,
 128 Eddie ... and er,
 129 Eddie they just,
 130 Eddie .. attack you from behind.
 131 Eddie they can't --
 132 Eddie they can't declare,
 133 Eddie .. who they are.
 134 Eddie .. they won't --
 135 Eddie so you don't know the enemy.
 136 Eddie .. so there's no way you can hit back.
 137 Int mm hm.
 138 Int Ray?
 139 Ray I suppose threat,
 140 Ray XX
 141 Ray springs to mind first off.
 142 Ray .. and then --
 143 Ray ... it's a form of blackmail,
 144 Ray .. or erm,
 145 Ray or bribery,
 146 Ray and if they don't get their own way,
 147 Ray ... somebody's going to get hurt, ?
 148 Ray as you say.
 149 Ray .. it's --
 150 Ray .. it's nuts,
 151 Ray but er --
 152 Ray it's a form of bullying.

Eddie picks up the idea of “a sneaky way” and “cowardice” (lines 120 to 123), and adds a further example of cowardly violent action in “hit and run”. From line 125 to the end of his turn (136), he develops this metaphor. In line 135, he refers to terrorists as “the enemy” which picks

up the war schema mentioned in line 86, and then concludes with a return to the “hit” part of the metaphor, emphasizing powerlessness in the face of terrorism. Ray adds two further examples of sneaky behaviour: “blackmail” (143) and “bribery” (145). In line 146, a sense of selfishness – “if they don't get their own way” – is added to the sense of cowardice. Ray concludes his turn by reiterating Terry’s comparison with “bullying” (voiced in line 84). The ideas of selfishness and recklessness are echoed by Reece very shortly afterwards: “they don't care who they blow up” (Extract 4)

Extract 4

156 Reece *name* <X that one X> said there,
 157 Reece ..[COUGH] they don't care who --
 158 Reece .. they don't care who,
 159 Reece the- they blow up

Selfishness and sneaky cowardice recur in Josh’s later turn (Extract 5), with a re-use of the metaphorical comparison with “blackmail”, and of Eddie's “way” metaphor in a slightly different form: “they want their own way”.

Extract 5

185 Josh you can get,
 186 Josh .. blown up.
 187 Josh .. it is,
 188 Josh er,
 189 Josh .. it is,
 190 Josh .. mental blackmail.
 191 Josh .. they want their own way,

The focus group discussion then moves to other topics, returning to terrorism, cowardice and war in the second cluster visible in figure 3. The episode (extract 6) is included in Appendix 2 since it covered 165 intonation units (about six minutes of talk). Finn's contribution in this episode is a perturbation in the dynamics of ideas, since he offers a very different point of view, trying to understand how terrorists see their actions¹². In turn, Ray, Eddie, Terry and Josh enter the debate that Finn has initiated. The ideas and attitudes that have been voiced thus far and that

we have examined – terrorism as cowardly, as selfish and uncaring, as different from war – are all picked up and talked about again, and a new type of metaphor enters the conversation: terrorism as unfair sport. We can track the interweaving of these different ways of framing terrorism through the discourse dynamics of the episode.

Throughout this episode, the evaluation of terrorist action as cowardly and unfair is continued and reinforced by emphasizing the innocence of their victims and the lack of adherence to conventions of war. “SPORT” metaphors are added to “CONCEALMENT” and “MILITARY” metaphors. Most striking in terms of the discourse dynamics is the attempt by Finn to get other people to think about a terrorist perspective and the negative responses this generates from the rest of the group.

Terry begins the episode with: “they do not care who they target”. The word “target” was included as a metaphor, vehicle grouping “MILITARY”, when it was used, not in its basic sense of a concrete object aimed at with a weapon by a military person, but to refer to people whom terrorists might kill through bombs or other actions. He gives examples of unfair “targets”: an old-age pensioner” (1060); “somebody who's five” (1063); “a young girl with a pram and a three month old” (1066). He emphasizes the uncaring nature with (part of) a metaphor in 1071: “they don't give a monkey's”¹³. In response to Terry's highly emphatic turn, Finn suggests that the terrorists are “seeing it as a war”(line 1075). He then uses a hypothetical quote to illustrate the implication of seeing terrorism as a war: <Q I'm right, you're wrong, you're the enemy Q> (1079-1081), voicing the attitude and stance of an imagined terrorist who would construct opposing groups of self and other as “us and you”. Terry responds to this quote: “that's not fair” (1084) as if Finn were himself adopting this position. Eddie's response to Finn, which overlaps with Terry's, is that terrorists do not “declare themselves as an enemy” and he, or someone else, adds

the “SPORT” metaphor: “it's not a level playing field” (1087) as a comment on the ethics of not declaring themselves. A playing field which is not level disadvantages one team and advantages the other; terrorism is unfair in an analogical way, since one side knows it's fighting or at war while the other does not. Finn responds and continues by citing British and US action in Iraq, restating his point in 1150 that terrorists “do see it as a war” and implying that that's why they don't care about victims such as those Terry mentioned: “women and children” (1154). Finn struggles in trying to present the terrorists' point of view to the group, who seem to respond to him almost as if he subscribes to their view himself. Josh objects with a rhetorical question: “there's a difference between war and terrorism though?” (1156-1158). Eddie, Terry, and then Finn, discuss whether terrorists can be an enemy if they have not “declared” themselves as such. Josh's contribution in 1184-5 is to suggest that terrorism resembles a specific form of war, guerrilla warfare. Terry returns to the theme of cowardice, quoting Eddie's metaphor of “hit and run” (1193), first spoken much earlier, in line 124, and then develops a contrasting scenario of braveness in which terrorists, hypothetically quoted, declare themselves an opposing “team” and declare the fighting started. In another allusion to the earlier talk by Eddie, Terry voices the hypothetically non-cowardly terrorist: “this is our team, that's your team, crack on” (1201-1203), developing the “SPORT” metaphor of the “level playing field”. Having moved from cowardice to bravery, Terry returns to cowardice with a further “CONCEALMENT” metaphor: “they hide in the woodwork”¹⁴. Finn again tries to question the reasoning, further extending the “SPORT” metaphor and asking who would “draw up the teams” (1211).

We conclude our examination of the discourse dynamics of the trajectories in figure 3 by looking at the final three metaphors (Extracts 6). These are spoken by Terry; two involve the metaphorical use of “target” and one refers to victims as “pawns in a game” (3276). The

attitudinal force of this “GAME” metaphor is powerlessness; pawns in chess are the least valuable pieces that may be sacrificed to save or gain more valuable pieces.

Extracts 6

3226 Terry I think if,
3227 Terry .. there's going to be a target,
3228 Terry .. it will be somewhere there.
3229 Terry but it .. doesn't bother me.

3260 Terry .. and the one in Wigan,
3261 Terry for example,
3262 Terry .. years ago,
3263 Terry .. I think what they target,
3264 Terry is commerce,

3272 Pat the economy.
3273 Pat it's the commerce side of it.
3274 Pat I think the --
3275 Pat the victims are there,
3276 Pat .. pawns in a game,
3277 Pat so to speak,

Scrutiny of the Excel table “GAME/SPORT”, “VIOLENT ACTION” and “MILITARY” shows that, after this point in the talk, no further metaphors from these groupings are used in reference to the key discourse topic of terrorism. Later uses refer to other topics: responses to terrorism, other threats in society and communication about terrorism.

In tracing the dynamics of these metaphors in talk about terrorism, we have shown some of the interweaving threads of ideas that speakers bring into the talk, emphasize and develop with metaphor, and how the ideas and the metaphors can pass from one speaker to another. We have seen how a perturbation to the dynamic system of the discussion, in the form of a very different point of view voiced by one participant, leads to a strengthening of attitudes, constructed through the re-use and development of previously used metaphors and the introduction of new metaphors. The discourse dynamics analysis of metaphors provides evidence to warrant a finding that we might express as follows:

For some of this focus group, terrorism is framed in opposition to war with its conventions of fair play between opposing sides that are clearly demarcated. In contrast, terrorism is held to be cowardly and unfair, and the lack of clarity about who is fighting contributes to feelings of threat.

This finding has emerged from tracing or tracking one thread of the talk as it develops over time, and splits into or merges with other threads. Other findings will emerge from other metaphor trajectories, and findings can be compared across multiple groups to provide answers to the research questions.

Summary and Conclusion

Our purpose in this article was to describe the discourse dynamics approach to metaphor and demonstrate how metaphor can be used as a tool to uncover people's ideas, attitudes and values through the procedures of metaphor-led discourse analysis.

We have used data from a focus group discussion to illustrate the procedures of metaphor-led discourse analysis: from transcription, through identifying and then coding metaphors, to exploring metaphor trajectories in the dynamic dialogue of ideas across the discourse event. We have shown how researchers can attend to maximizing the trustworthiness of the metaphor analysis, complementing imagination in interpretation with caution and rigour.

It is our hope that other researchers will be tempted to examine the discourse dynamics of metaphor, using and adapting the method set out here to investigate "the intricate web of sense-making and sense-creating" that happens when people engage in spontaneous discourse. Metaphor is, we argue, uniquely suited to this use as a delicate research instrument for investigating the web of meaning without removing it from the discourse in which it was constructed.

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NOTES

¹ In the project, twelve focus groups and eight interviews with experts were analysed. For the methodological purposes of this paper, we draw on just one of the focus groups. Ethical approval for the study was given by the Institute of Psychological Sciences, University of Leeds.

Participants gave informed consent in line with British Psychological Society guidelines, and all names given are aliases.

² A methodological comment is needed at this point on the identification issues raised by the utterance “it’s almost like bullying” and the later utterance “it’s not like war” (86). These positive and negative comparisons between terrorism and bullying/war are not metaphorical statements but are literally true: terrorism is not like war. However, the bringing together in each case of two distinct ideas or concepts – terrorism ~ bullying; terrorism ~ war – could be said to be a metaphorical act, and it is this that justifies its inclusion as metaphor.

³ Historically, “opposing sides” is metonymic, since battles in times gone by did in fact involve two groups of people facing each other. Contemporaneously, however, opposing sides are characteristic less of war than of various sports and games, including football and chess (Howe, 2008; Ritchie, 2003).

⁴ We are always and everywhere held hostage by the tendency of the English language to prefer nouns over verbs for carrying import. The phrase “metaphor use” itself suggests an object put to

use. We might describe a dynamic perspective more accurately with verbs such as “metaphorising” but this does not come easily or elegantly.

⁵ Interestingly, the metaphor of society as system has recently been extended to incorporate ideas of complex dynamic systems (Byrne, 2002), illustrating how a stabilized metaphor is not fixed and static but still open to change.

⁶ Metaphor-led discourse analysis (MLDA) may be distinguished from metaphor studies in the tradition of Critical Discourse Analysis (CDA), called Critical Metaphor Analysis (CMA) by Charteris-Black (2004), in remit, theoretical assumptions and method. CMA is centrally concerned with ideology and social relations of power/dominance, and makes claims about these in respect of groups of people; MLDA can be applied to any social science issue, and to groups or individuals. CMA works within conceptual metaphor theory and explains the connection between ideology and language through the conceptual metaphors inferred from corpus data. MLDA, on the other hand, works within the discourse dynamics framework, informed by complexity / dynamic systems theory; connections between people’s ideas, attitudes, values and language use are explained through patterns of linked linguistic metaphors found in discourse data. Finally, although developed in research projects motivated by a concern for social justice, MLDA does not adopt the explicit political stance of CDA.

⁷ In reality, external and internal framings may not be straightforward to distinguish. Again, the researcher needs evidence from the discourse to justify any such claim.

⁸ ‘Linguistic metaphor’ refers to metaphors in language use, in contrast to metaphors in thought.

In our work, the term does not refer to linguistic instantiations of conceptual metaphors.

⁹ Embedded metaphors tend to be highly conventionalized.

¹⁰ In a dynamic approach, a second use of metaphor is not ‘repeated’, since the discourse context is changed, but is more accurately said to be re-used.

¹¹ Figure 3 uses metaphor visualization software, VisDis, specially developed for an earlier project at the University of Leeds (Cameron & Stelma, 2004).

¹² Finn was a student and thus different from other members of the focus group who worked in manual or non-skilled jobs. He was probably recruited for the focus group (not by the project researchers but by a market research organization employed to do this) on the basis of his income or part-time job.

¹³ This idiom means not to care about something. Candidates for the final missing word include toss, fart, uncle, curse.

¹⁴ This metaphor could also have been grouped as “NATURAL WORLD” since its basic meaning is probably connected with small animals or insects, such as mice or cockroaches, that hide in the wood panelling of houses and come out to destroy the material environment. The

attitudinal force of the metaphor was judged to lie more in the sense of concealment than in the animal sense.

REFERENCES

- Bakhtin, M. M. (1981). *The Dialogic Imagination*. Austin: University of Texas Press.
- Barr, D. (2004). Establishing conventional communication systems: Is common knowledge necessary? *Cognitive Science*, 28, 937-962.
- Bowdle, B., & Gentner, D. (2005). The career of metaphor. *Psychological Review*, 112(1), 193-216.
- Brewster Smith, M. (2002). The metaphor (and fact) of war. *Peace Psychology*, 8(3), 249-258.
- Byrne, D. (2002). *Interpreting Quantitative Data*. London: Sage.
- Cameron, L. (1999). Identifying and describing metaphor in spoken discourse data. In L. Cameron & G. Low (Eds.), *Researching and Applying Metaphor* (pp. 105-132). Cambridge: Cambridge University Press.
- Cameron, L. (2003). *Metaphor in Educational Discourse*. London: Continuum.
- Cameron, L. (2007a). Confrontation or complementarity: Metaphor in language use and cognitive metaphor theory. *Annual Review of Cognitive Linguistics*, 5, 107-135.
- Cameron, L. (2007b). Patterns of metaphor use in reconciliation talk. *Discourse and Society*, 18(2), 197-222.
- Cameron, L., & Deignan, A. (2006). The emergence of metaphor in discourse. *Applied Linguistics*, 27(4), 671-690.
- Cameron, L., & Stelma, J. (2004). Metaphor clusters in discourse. *Journal of Applied Linguistics*, 1(2), 7-36.
- Cavalcanti, M., & Bizon, A. C. (2008). En route through metaphors: Chatrooms as safe places to deal with difficulties in an online course. In M. S. Zanutto, L. Cameron & M. Cavalcanti

- (Eds.), *Confronting Metaphor in Use: An applied linguistic approach* (pp. 243-266).
Amsterdam: John Benjamins Publishing Company.
- Charteris-Black, J. (2004). *Corpus approaches to critical metaphor analysis*. Basingstoke:
Palgrave Macmillan.
- Charteris-Black, J. (2006). Britain as a container: Immigration metaphors in the 2005 election
campaign. *Discourse and Society*, 17(5), 563-581.
- Gibbs, R., & Cameron, L. (2008). The social-cognitive dynamics of metaphor performance.
Journal of Cognitive Systems Research, 9(1-2), 64-75.
- Howe, J. (2008). Argument is argument: An essay on conceptual metaphor and verbal dispute.
Metaphor & Symbol, 23, 1-23.
- Jackson, R. (2005). *Writing the war on terrorism: Language, Politics, and Counter-Terrorism*.
Manchester: Manchester University Press.
- James, W. (1890). *Principles of Psychology*. Retrieved 13 October 2008, from
<http://psychclassics.yorku.ca/James/Principles/prin9.htm>
- Kövecss, Z. (2005). *Metaphor and Culture*. New York: Cambridge University Press.
- Lakoff, G. (2001). *Metaphors of Terror*. Retrieved 7 January, 2009, from
<http://www.press.uchicago.edu/News/911lakoff.html>
- Lakoff, G., & Johnson, M. (1980). *Metaphors We Live by*. Chicago: University of Chicago Press.
- Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford:
Oxford University Press.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

- Lincoln, Y., & Guba, E. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research: Second Edition* (pp. 163-188). Thousand Oaks, CA: Sage Publications, Inc.
- Linnell, P. (1998). *Approaching dialogue*. Amsterdam: John Benjamins.
- Low, G. (2008). Metaphor and positioning in academic book reviews. In M. S. Zanotto, L. Cameron & M. Cavalcanti (Eds.), *Confronting Metaphor in Use: An applied linguistic approach* (pp. 79-100). Amsterdam: John Benjamins Publishing Company.
- Markova, I., Linnell, P., Grossen, M., & Orvig, A. S. (2007). *Dialogue in Focus Groups*. London: Equinox.
- Musolff, A. (2004). *Metaphor and political discourse: Analogical reasoning in debates about Europe*. Basingstoke: Palgrave Macmillan.
- pragglejaz group. (2007). MIP: A method for identifying metaphorically-used words in discourse. *Metaphor and Symbol*, 22(1).
- Quinn, N. (1991). The cultural basis of metaphor. In J. Fernandez (Ed.), *Beyond Metaphor: The Theory of Tropes in Anthropology* (pp. 56-93). Stanford, CA: Stanford University Press.
- Ritchie, D. (2003). "ARGUMENT IS WAR" - Or is it a game of chess? Multiple meanings in the analysis of implicit metaphors. *Metaphor and Symbol*, 18(2), 125-146.
- Semino, E. (2002). A sturdy baby or a derailing train? Metaphorical representations of the euro in British and Italian newspapers. *Text*, 22(1), 107-139.
- Slobin, D. (1996). From "Thought and Language" to "Thinking for Speaking". In J. Gumperz & S. Levinson (Eds.), *Rethinking Linguistic Relativity* (pp. 70-96). New York: Cambridge University Press.
- Spivey, M. (2007). *The continuity of mind*. New York: Oxford University Press.

Strauss, C., & Quinn, N. (1997). *A cognitive theory of cultural meaning*. New York: Cambridge University Press.

Vervaeke, J., & Kennedy, J. (1996). Metaphors in language and thought: Falsification and multiple meanings. *Metaphor and Symbolic Activity*, 11, 273-284.

Appendix 1

Appendix 1 Vehicle groupings

BALANCE

BLOW

BODY-FOOD-CLOTHES

BUILDING

CIRCLE

CLEAN - DIRTY

COMMERCE

CONCEALMENT

CONCRETISING

CONNECT - SEPARATE

CONSTRAINT

CONTAINER

CRAZY / WILD

DEPTH

DIMENSION

FEELING

FINDING - LOSING

FOLLOWING - LEADING

FORM

GAME

GIVING - TAKING

HARD

HOME

HORIZONTAL (LANDSCAPE)

HOT - COLD

INCLINE

LABEL

LOCATION

MACHINE

MILITARY

MOVEMENT

NATURAL WORLD

NUMBER

OPEN - CLOSE

PHYSICAL ACTION

POINT

READING - WRITING

RELIGION

SEEING

SORT

SOUND

SPEAKING / LISTENING

STRENGTH

SUPPORT

THEATRE / STORIES

VIOLATE / LIMITS

VIOLENT ACTION

WATER

COMPONENT PARTS

THING

EXPLETIVE

OTHER

Appendix 2

Extract 7

1050 Terry they do not care,
 1051 Terry who they target.
 1052 xx XX
 1053 Terry if I don't like you lot,
 1054 Terry .. and I want to kill you all,
 1055 Terry .. fair enough.
 1056 Terry .. but .. these,
 1057 Terry .. they don't know,
 1058 Terry it could be a --
 1059 Terry .. it could be a an a- --
 1060 Terry an old age pensioner,
 1061 Terry it could be .. somebody who's,
 1062 Terry .. ninety-five,
 1063 Terry it could be somebody who's five.
 1064 xx mm.
 1065 Terry or it could be a y- --
 1066 Terry a young girl with a pram,
 1067 Terry .. and a three-month-old.
 1068 Terry ... when that bomb goes off,
 1069 Josh oh yeah,
 1070 Terry they don't --
 1071 Terry .. they don't give a monkey's.
 1072 xx they don't care.
 1073 Terry and that's what X
 1074 Finn X
 1075 Finn they're seeing it as a war.
 1076 Finn that's what they're seeing it as.
 1077 Finn ... they're seeing it as,
 1078 Finn like,
 1079 Finn .. <Q I'm right,
 1080 Finn you're wrong,
 1081 Finn you're the enemy Q>.
 1082 Finn ... we live in Britain,
 1083 Finn we X
 1084 Terry [but that's not fair
 1085 Eddie [they don't declare themselves as an
 enemy
 1086 xxx [<XXXX>
 1087 xx [it's not a level playing field
 1088 Finn [well it's not though,
 1089 Finn but like,
 1090 Finn .. who's to say
 1091 Terry XX
 1092 Finn well yeah,
 1093 Finn .. they're not going to see it like,
 1094 Finn <Q oh well,
 1095 Finn .. fair enough,
 1096 Finn .. we'll go and bomb Q>,
 1097 xx XX
 1098 Finn <Q we'll go and bomb XX,
 1099 Finn 'cos they signed up for it Q>,
 1100 Finn .. they don't see it like that.
 1101 Finn .. it's like any country.
 1102 Finn like when --
 1103 Finn .. say if we're --
 1104 Finn .. say in Iraq,
 1105 Finn .. we went <X opened X> that,
 1106 Finn .. <Q shock and awe Q> thing.

1107 Finn .. we didn't --
 1108 Finn .. we weren't bombing specific places.
 1109 Finn we were bombing wherever --
 1110 Finn like,
 1111 Finn wherever you --
 1112 Finn they could say,
 1113 Finn X,
 1114 Finn do the most damage.
 1115 Finn .. that's what,
 1116 Finn .. that's what they see it as.
 1117 Finn it's a war.
 1118 Ray no,
 1119 Ray they were bombing specific places.
 1120 Finn yeah,
 1121 Finn they bombed specific places,
 1122 Finn but,
 1123 Finn .. they're not saying like,
 1124 Finn there's only soldiers living in those places.
 1125 xx XX
 1126 Finn [XX
 1127 Finn there're actual .. innocent people
 1128 xx [X
 1129 xx there are all sorts that were <X bombed X>.
 1130 Finn yeah but there's actually --
 1131 Finn what I'm saying is,
 1132 Finn there's innocent people that,
 1133 Finn like,
 1134 Finn .. who live there,
 1135 Finn in the first place.
 1136 Finn .. b- because,
 1137 Finn ... we can justify it,
 1138 Finn saying.
 1139 Finn <Q oh,
 1140 Finn it's a war Q>.
 1141 Finn which is what,
 1142 Finn like,
 1143 Finn ... (1.0) say right --
 1144 Finn well I've managed to give them,
 1145 Finn some sort of like,
 1146 Finn .. X like,
 1147 Finn what I've --
 1148 Finn .. what I think it could be.
 1149 Finn .. like these,
 1150 Finn .. like terrorists do see it as a war.
 1151 Finn .. they don't care --
 1152 Finn they --
 1153 Finn they're not bothered about,
 1154 Finn whether it's women and children,
 1155 Finn or anything X
 1156 Josh there's a difference,
 1157 Josh between war and terrorism,
 1158 Josh though? [20.54]
 1159 Finn well there is.
 1160 Finn there's a <X definite difference X>
 1161 Eddie X if we were at war,
 1162 Eddie .. and- and it was --
 1163 Eddie it was
 1164 Finn [who says X
 1165 Eddie [XX
 1166 Finn who's to say,
 1167 Finn that the terrorists don't believe,
 1168 Finn that they're at war,

1169 Finn themselves?
 1170 Eddie well they possibly are,
 1171 Eddie but they don't declare themselves,
 1172 Eddie as an enemy.
 1173 Eddie that's what I'm saying.
 1174 Terry they don't declare,
 1175 Terry but they are <X an enemy X>
 1176 Finn I don't think Iraq,
 1177 Finn d- declared themselves as an o- --
 1178 Finn enemy at the s- --
 1179 Finn at that time.
 1180 Finn .. anyway,
 1181 Finn did they?
 1182 Terry they don't come out and say it
 1183 xxx [<XXXX>
 1184 Josh [it's like guerrilla --
 1185 Josh it's like guerrilla warfare
 1186 Eddie X terrorists in general,
 1187 Terry it's --
 1188 Terry it's like,
 1189 Terry Eddie said earlier on,
 1190 Terry it's --
 1191 Terry .. there's a certain element of cowardice,
 1192 Eddie yeah.
 1193 Terry .. it's hit and run,
 1194 Terry X
 1195 xxx <XXXX>
 1196 Terry if they --
 1197 Terry if they --
 1198 Terry if they were that brave,
 1199 Terry .. surely they'd say,
 1200 Terry <Q right,
 1201 Terry .. this is our team,
 1202 Terry .. that's your team,
 1203 Terry ... crack on Q> []
 1204 xx XX
 1205 Terry but they don't,
 1206 Terry .. because they hide in the woodwork.
 1207 xx mm.
 1208 xx mm.
 1209 Finn well who's to --
 1210 Finn who's --
 1211 Finn who's <X to draw up >X the teams?
 1212 Finn .. who's to say,
 1213 Finn which is the --
 1214 Finn which is on --
 1215 Finn who's on which team?

Figure 1. Screenshot of Excel worksheet for metaphors in Extract 1

	A	B	C	D	E	F	G	H	I
	key topic	Vehicle grouping	Group	metaphor	line no	Speaker	intonation unit	question	
2	1	MOVEMENT	LeCDM	comes into	77	Mod	that comes into your mind?	MIND	
3	1	CONCEALMENT	LeCDM	sneaky	81	Paul	.. it's a sneaky way --	MIND	
4	1	MOVEMENT (PATH)	LeCDM	way	81	Paul	.. it's a sneaky way --	MIND	
5	1	VIOLENT ACTION	LeCDM	like bullying	82	Paul	.. it's almost like bullying,	MIND	
6	1	MILITARY	LeCDM	not like war	86	Paul	it's not like war	MIND	
7	1	CONNECT / SEPARATE	LeCDM	opposing sides	87	Paul	.. where you've got two .. opposing sides.	MIND	
8	1	GIVING / TAKING	LeCDM	get from	106	Phil	you'd get from it.	MIND	
9	3A	MACHINE	LeCDM	system	108	Phil	... I would also say it's a flaw in the system.	MIND	
10	1	LOCATION	LeCDM	in the first place	112	Phil	it wouldn't happen in the first place.	MIND	
11	1	MOVEMENT (GOAL)	LeCDM	come to	117	Eddie	bombs come to my mind,	MIND	
12	1	CONCEALMENT	LeCDM	sneaky	120	Eddie	I think it's a sneaky --	MIND	
13	1	CONCEALMENT	LeCDM	sneaky	121	Eddie	.. sneaky way of doing it,	MIND	
14	1	MOVEMENT (PATH)	LeCDM	way	121	Eddie	.. sneaky way of doing it,	MIND	
15	1	VIOLENT ACTION	LeCDM	hit and run	124	Eddie	.. hit and run.	MIND	
16	1	MOVEMENT	LeCDM	running	126	Eddie	.. not even bothered about running now,	MIND	
17	1	MOVEMENT (SOURCE)	LeCDM	from behind	130	Eddie	.. attack you from behind.	MIND	
18	3A	MOVEMENT (PATH)	LeCDM	way	136	Eddie	.. so there's no way you can hit back.	MIND	
19	3A	VIOLENT ACTION	LeCDM	hit back	136	Eddie	.. so there's no way you can hit back.	MIND	
20	1	ANIMALS / NATURE	LeCDM	springs	141	Ray	springs to mind first off	MIND	
21	1	LOCATION	LeCDM	off	141	Ray	springs to mind first off	MIND	
22	1	FORM	LeCDM	a form	143	Ray	... it's a form of blackmail,	MIND	
23	1	MOVEMENT (PATH)	LeCDM	way	146	Ray	and if they don't get their own way,	MIND	
24	1	MOVEMENT (PATH)	LeCDM	way	146	Ray	and if they don't get their own way,	MIND	
25	1	BODY	LeCDM	nuts	150	Ray	.. it's nuts,	MIND	

Figure 2. Screenshot of Excel worksheet for “MACHINE” metaphors

Microsoft Excel - LeedsCDMen08.xls

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	A	B	C	D	E	F	G	H	I	J	K
1	3A	MACHINE	LeCDM	system	108	Phil	... I would also say it's a <u>flaw in the system</u> .	MIND			
2	1	MACHINE	LeCDM	system	874	Phil	... (1.0) <u>put a flaw in the system</u> .	LIVES			
3	1	MACHINE	LeCDM	system	1527	Paul	[] X <u>through the system</u> .	GROUPS 1			
4	3A	MACHINE	LeCDM	run	2152	Eddie	and we should <u>run it</u> []	SAME			
5	3A	MACHINE	LeCDM	run	2156	Eddie	[] as we want to <u>run it</u> .	SAME			
6	3A	MACHINE	LeCDM	systems	2780	xxx	the <u>systems not working</u> []	GOV DIFF			
7	1	MACHINE	LeCDM	grind	3267	Paul	.. <u>grind the city to a halt</u> .	RISKS 2 (SELF)			
8	3A	MACHINE	LeCDM	automatic	4064	Phil	it's just done <u>automatically</u> .	HR			
9	3A	MACHINE	LeCDM	run	4401	Phil	.. and the <u>way it's run</u> .	HR			
10	3A	MACHINE	LeCDM	run	4406	Phil	they don't believe <u>in the way it's run</u> .	HR			
11	3A	MACHINE	LeCDM	run	5414	Phil	.. can <u>run</u> our country right.	POSITIVE			
12	3A	MACHINE	LeCDM	work	5438	Phil	... it wouldn't <u>work</u> .	POSITIVE			
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Sheet1 / V-Ts / Topic 1 / extract one /

Ready

Figure 3. Display of metaphors expressing cowardice and from “WAR/MILITARY” grouping



